

Truck crops were unfavorably affected by continued dry weather in the Southeast, especially in Florida, but conditions were more favorable in the central valley States, and truck made good progress on the Pacific coast.

Pastures continued in good condition in most interior States, but there was a lack of moisture in most of the South, while rain was needed in some central Rocky Mountain areas. Range grass cured well in most west-

ern grazing sections and, at the close of the month, stock were being moved from summer ranges in parts of the Rocky Mountain States.

The weather was favorable for drying fruit in California, but the continued dry weather in Florida unfavorably affected citrus fruit in that State where much dropping was reported. Citrus continued in excellent condition in California.

CLIMATOLOGICAL TABLES.*

CONDENSED CLIMATOLOGICAL SUMMARY.

In the following table are given for the various sections of the climatological service of the Weather Bureau the monthly average temperature and total rainfall; the stations reporting the highest and lowest temperatures, with dates of occurrence; the stations reporting the greatest and least total precipitation; and other data as indicated by the several headings.

The mean temperature for each section, the highest and lowest temperatures, the average precipitation, and the greatest and least monthly amounts are found by using all trustworthy records available.

The mean departures from normal temperatures and precipitation are based only on records from stations that have 10 or more years of observations. Of course the number of such records is smaller than the total number of stations.

Condensed climatological summary of temperature and precipitation by sections, September, 1921.

Section.	Temperature.								Precipitation.							
	Section average.	Departure from the normal.	Monthly extremes.						Section average.	Departure from the normal.	Greatest monthly.		Least monthly.			
			Station.	Highest.	Date.	Station.	Lowest.	Date.			Station.	Amount.	Station.	Amount.		
Alabama.....	81.2	+6.2	Madison.....	102	5	Valley Head.....	53	30	2.73	-0.76	Tuscmibia.....	6.49	Auburn.....	6.48		
Arizona.....	73.7	+0.1	2 stations.....	112	12†	Fort Valley.....	31	19	0.73	-0.37	Soldier Camp.....	5.09	8 stations.....	5.08		
Arkansas.....	79.6	+6.0	2 stations.....	104	2†	Gravette.....	35	30	0.41	+0.03	Arkansas City.....	6.98	Huttig.....	6.67		
California.....	67.3	-1.2	Greenland Ranch.....	116	13	Fordyce Dam.....	26	15	-0.08	Nellie.....	4.40	25 stations.....	4.00			
Colorado.....	58.3	+1.1	2 stations.....	100	14†	2 stations.....	3	21†	-0.97	Cheyenne Wells.....	3.81	2 stations.....	3.00			
Florida.....	81.6	-2.7	Orlando.....	103	7	Glen St. Mary.....	56	16	-4.53	Punta Gorda.....	8.20	Okeechobee.....	8.28			
Georgia.....	81.2	+6.2	3 stations.....	104	1†	Blue Ridge.....	57	22†	-1.44	Cornelia.....	6.22	Goat Rock.....	6.29			
Hawaii.....	74.3	-0.3	Mahukona.....	94	15	3 stations.....	52	27†	1.92	Eke, Maui.....	18.50	6 stations.....	18.00			
Idaho.....	53.0	-3.9	Glenns Ferry.....	98	6	Stanley.....	10	12†	-0.30	Oxford R. S.....	4.52	Arco.....	4.50			
Illinois.....	71.6	+4.6	Mount Carmel.....	98	16	4 stations.....	40	26	+3.10	Henry.....	10.07	Mount Carmel.....	3.01			
Indiana.....	71.4	+4.7	Wheatfield.....	98	28	4 stations.....	38	25	+2.58	Veedersburg.....	12.20	Mount Vernon.....	1.82			
Iowa.....	67.3	-3.9	Mount Pleasant.....	99	4	2 stations.....	31	30	+3.36	Olin.....	11.95	Lemars.....	1.72			
Kansas.....	73.7	+4.6	Salina.....	107	3	2 stations.....	30	30	+0.58	Paola.....	10.07	Hugoton.....	0.16			
Kentucky.....	75.5	+5.5	2 stations.....	99	4	Owensboro.....	45	30	+2.61	Eubank.....	9.53	Frankfort.....	2.99			
Louisiana.....	81.5	+4.2	2 stations.....	102	11†	Calhoun.....	52	30	-0.74	Covington.....	8.78	Angola.....	0.19			
Maryland-Delaware.....	72.6	+5.3	2 stations.....	99	2	Oakland, Md.....	37	26	+0.23	Friendsville, Md.....	7.63	Salisbury, Md.....	0.28			
Michigan.....	64.9	+5.0	Adrain.....	95	1	Deer Park.....	21	16	+0.73	Port Austin.....	7.50	St. Ignace.....	0.46			
Minnesota.....	60.5	+2.8	Beardsley.....	99	1	Itasca State Park.....	27	29	+1.56	Canby.....	8.32	Meadowlands.....	1.75			
Mississippi.....	81.5	+5.9	2 stations.....	103	13	2 stations.....	46	30	+1.56	Greenville.....	6.66	Bay St. Louis.....	0.58			
Missouri.....	73.4	+4.7	Caruthersville.....	104	4†	Steffenville.....	34	30	+3.15	Avalon.....	14.95	Hollister.....	0.95			
Montana.....	51.1	-3.9	Ballantine.....	98	1	Wheaton.....	10	11	-0.28	Outlook.....	3.91	2 stations.....	0.00			
Nebraska.....	66.4	+2.7	2 stations.....	105	3	Nenzel.....	23	30	+0.19	Nebraska City.....	10.21	Gordon.....	1.80			
Nevada.....	61.9	-0.4	Logandale.....	105	4	San Jacinto.....	16	16	-0.22	Searchlight.....	2.02	8 stations.....	0.00			
New England.....	63.1	+3.3	Somerset, Vt.....	99	1†	2 stations.....	25	19†	-1.12	Waterbury, Conn.....	7.50	Provincetown, Mass.....	0.65			
New Jersey.....	70.2	+4.5	Bridgeton.....	99	2	Charlotteburg.....	36	27	-1.26	Sussex.....	5.04	Cape May.....	0.80			
New Mexico.....	66.1	+1.9	2 stations.....	101	5†	Senorito (near).....	21	21	-0.65	Portales.....	6.44	11 stations.....	0.00			
New York.....	65.5	+4.4	2 stations.....	97	2†	Indian Lake.....	29	27	-0.79	Townsend.....	5.62	Sharon Springs No. 2.....	0.74			
North Carolina.....	76.4	+6.6	Tarboro.....	104	2	Banners Elk.....	46	24	-1.03	Rock House.....	7.54	Red Springs.....	0.78			
North Dakota.....	57.0	+0.6	Hettinger.....	101	1	Hettinger.....	25	30	+1.66	Mott.....	6.83	Mott.....	1.37			
Ohio.....	70.1	+4.6	2 stations.....	98	1	3 stations.....	38	29	+1.67	Amesville.....	8.74	Delaware.....	2.03			
Oklahoma.....	79.0	+5.0	Oakwood.....	108	4	3 stations.....	32	30	-0.01	Reno Junction.....	7.83	Goodwell.....	0.00			
Oregon.....	56.3	-2.3	Blitzen.....	92	1	Lapine.....	5	13	-0.01	Cascade Locks.....	5.12	Tule Lake.....	T.			
Pennsylvania.....	68.9	+5.1	4 stations.....	98	2	Brady's Bend.....	31	24	+1.35	Clearfield.....	11.48	George School.....	1.47			
South Carolina.....	80.0	+5.8	Florence No. 1.....	104	4	Darlington.....	57	24	-0.51	Clemson College.....	7.54	Conway.....	0.41			
South Dakota.....	61.3	+1.0	Hopewell.....	104	1	4 stations.....	26	11	+2.07	La Delle.....	10.06	2 stations.....	0.10			
Tennessee.....	77.7	+6.6	Clarksville.....	102	5	Kenton.....	50	30	+1.33	Johnsonville.....	11.31	Clinton.....	1.35			
Texas.....	81.1	+4.0	Big Spring.....	107	10	Dalhart.....	35	30	+1.20	Taylor.....	25.87	2 stations.....	0.00			
Utah.....	59.2	-0.3	St. George.....	99	27	2 stations.....	18	17†	-0.47	New Harmony.....	2.06	8 stations.....	0.00			
Virginia.....	74.1	+5.9	Randolph.....	104	2	3 stations.....	46	22†	-0.58	Fredericksburg.....	5.61	Onley.....	0.55			
Washington.....	55.1	-2.9	Wheeler.....	91	27	2 stations.....	19	13	+0.47	Paradise Inn.....	16.27	Wapato.....	0.00			
West Virginia.....	70.9	+5.1	2 stations.....	97	1†	Bayard.....	39	26	+1.99	Bruceton Mills.....	9.07	Kanawha Falls.....	1.32			
Wisconsin.....	63.4	+3.9	Richland Center.....	96	3	Long Lake.....	27	26	+1.39	Watertown.....	11.02	Merrill.....	2.10			
Wyoming.....	54.0	-0.7	3 stations.....	98	2†	South Pass City.....	10	29	-0.77	Dutch Joe.....	1.44	3 stations.....	0.00			

*For description of tables and charts, see REVIEW, January, 1921, p. 41.

†Other dates also.

TABLE 1.—Climatological data for Weather Bureau Stations, September, 1921.

Districts and stations.	Elevation of instruments.				Pressure.				Temperature of the air.								Precipitation.				Wind.				Average cloudiness, tenths.										
	Baometer above sea level.	Thermometer above ground.	Anemometer above ground.	Station, reduced to mean of 24 hours.	In.	In.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	%	In.	In.	Miles	Total movement.	Prevailing direction.	Maximum velocity.	Date.	Clear days.	Partly cloudy days.	Snow, sleet, and ice on ground at end of month.									
	Ft.	Ft.	Ft.	In.	In.	65.0	+ 4.5	59.2	+ 4.0	89	3	68	44	27	19	51	51	81	2,36	- 0.6	11	7,262	s.	38	s.	22	11	12	7	4.4	0-10	In.	In.		
New England.																																			
Eastport.	76	67	85	29.90	29.98	- .05		59.2	+ 4.0	89	3	68	44	27	19	51	51	81	2,36	- 0.6	11	7,262	s.	38	s.	22	11	12	7	4.7	0.0	0.0	0.0		
Greenville, Me.	1,070	6	28	28.83	29.99			57.2		83	2	68	44	27	21	51	51	81	2,36	- 0.6	11	7,262	s.	38	s.	22	11	12	7	4.7	0.0	0.0	0.0		
Portland, Me.	103	82	117	29.90	30.02	- .03		63.3	+ 3.7	91	2	72	44	27	21	55	56	81	1,64	- 1.6	10	6,073	s.	40	se.	21	19	5	6	3.3	0.0	0.0	0.0		
Concord.	288	70	79	29.72	30.02	- .04		63.3	+ 4.2	92	2	72	46	27	20	55	56	81	2,40	- 0.8	9	3,072	nw.	22	s.	17	20	4	6	3.5	0.0	0.0	0.0		
Burlington.	404	11	48	29.56	29.99	- .07		62.7	+ 3.8	74	2	72	46	27	20	50	49	81	2,54	- 0.8	9	7,880	s.	48	s.	30	11	9	10	5.7	0.0	0.0	0.0		
Northfield.	876	12	60	29.05	30.02	- .04		58.0	+ 4.4	83	2	72	47	27	21	52	54	81	1,79	- 1.0	11	5,058	s.	33	sw.	31	w.	18	15	9	6	4.2	0.0	0.0	0.0
Boston.	125	115	188	29.38	30.02	- .03		66.7	+ 3.9	87	3	72	49	21	60	19	62	60	84	1,22	- 1.5	9	6,436	sw.	42	sw.	25	12	13	5	4.8	0.0	0.0	0.0	
Nantucket.	12	14	90	30.03	30.03	- .03		67.0	+ 2.9	82	3	72	49	21	60	17	61	58	81	0,80	- 1.8	11	9,502	nw.	42	sw.	22	16	18	16	4.2	0.0	0.0	0.0	
Block Island.	160	215	251	29.35	30.02	- .05		68.0	+ 7.1	95	3	72	49	21	61	57	74	3,21	- 0.3	8	7,476	nw.	38	nw.	18	13	12	11	5.3	0.0	0.0	0.0			
Providence.	159	122	140	29.85	30.02	- .05		68.8	+ 4.9	94	3	72	49	21	61	57	74	2,77	- 1.0	11	5,871	sw.	38	sw.	30	10	11	5	4.0	0.0	0.0	0.0			
Hartford.	106	74	153	29.92	30.03	- .04		68.8	+ 4.9	94	3	72	49	21	61	57	74	2,77	- 1.0	11	5,871	sw.	38	sw.	30	14	11	5	4.0	0.0	0.0	0.0			
New Haven.																																			
Middle Atlantic States.																																			
Albany.	97	102	115	29.91	30.01	- .06		67.7	+ 5.4	94	2	72	42	27	21	58	30	60	51	74	1,44	- 1.7	9	5,184	s.	33	s.	25	18	7	5	3.5	0.0	0.0	0.0
Binghamton.	871	10	84	29.10	30.02	- .05		67.0	+ 7.0	93	2	72	42	27	21	56	34	63	53	74	3,20	- 0.4	10	3,491	ne.	24	sw.	30	9	9	12	5.4	0.0	0.0	0.0
New York.	314	414	454	29.70	30.03	- .05		71.0	+ 4.5	94	3	72	44	24	21	54	55	63	53	74	2,96	- 0.6	10	10,223	s.	56	nw.	31	9	12	9	5.3	0.0	0.0	0.0
Harrisburg.	374	94	104	29.65	30.04	- .04		70.8	+ 5.9	94	1	72	44	24	21	52	53	63	59	71	2,73	- 0.1	12	3,567	w.	32	sw.	30	8	14	9	5.4	0.0	0.0	0.0
Philadelphia.	117	123	190	29.92	30.05	- .03		72.8	+ 5.4	92	2	72	45	27	20	55	56	66	64	75	2,21	- 1.2	12	5,845	s.	38	s.	30	9	11	10	5.4	0.0	0.0	0.0
Reading.	325	81	98	29.70	30.04	- .05		71.3	+ 5.2	95	2	72	47	24	21	59	59	63	59	73	3,48	+ 1.5	9	4,194	sw.	36	sw.	30	10	13	9	5.2	0.0	0.0	0.0
Scranton.	805	111	119	29.18	30.03	- .04		63.1	+ 5.9	90	1	72	43	27	21	58	51	63	57	73	4,38	+ 1.5	9	4,086	s.	27	s.	21	14	8	8	4.6	0.0	0.0	0.0
Atlantic City.	52	37	48	29.88	30.03	- .04		71.6	+ 4.0	93	3	72	44	27	21	58	64	71	51	74	1,51	- 1.5	5	5,587	s.	34	nw.	30	11	12	7	4.8	0.0	0.0	0.0
Cape May.	18	13	49	30.05	30.07	- .06		72.9	+ 3.9	93	3	72	47	24	21	58	66	72	58	74	0,80	- 2.2	5	5,587	s.	34	s.	30	11	12	7	5.1	0.0	0.0	0.0
Sandy Hook.	22	10	55	30.01	30.03	- .05		71.4	-	91	2	72	47	24	21	58	63	62	77	1,47	- 0.7	8	9,378	s.	52	s.	30	11	9	10	5.1	0.0	0.0	0.0	
Trenton.	190	159	183	29.83	30.03	- .05		70.6	-	92	2	72	47	24	21	58	63	62	77	1,69	- 1.9	6	5,287	s.	58	s.	30	8	19	12	6.0	0.0	0.0	0.0	
Baltimore.	123	100	113	29.90	30.02	- .06		74.5	+ 5.9	96	2	72	48	27	21	57	62	70	70	74	3,19	- 0.7	3	7,040	s.	24	sw.	30	8	13	9	5.4	0.0	0.0	0.0
Washington.	112	62	85	29.92	30.03	- .05		74.4	+ 6.3	95	2	72	48	27	21	58	62	70	70	74	3,29	- 0.3	3	9,399	sw.	33	nw.	30	11	12	7	4.5	0.0	0.0	0.0
Lynchburg.	681	153	188	29.32	30.05	- .01		75.5	+ 7.1	99	2	72	48	27	21	59	63	74	71	74	1,71	- 1.9	9	6,019	c.	34	w.	4	11	14	6	4.0	0.0	0.0	0.0
Norfolk.	91	170	205	29.96	30.05	- .01		77.8	+ 6.1	96	2	72	48	27	21	60	68	74	74	79	2,43	- 1.6	6	6,990	s.	36	nw.	30	10	11	9	5.1	0.0	0.0	0.0
Richmond.	144	11	52	29.90	30.04	- .03		76.8	+ 6.0	92	2	72	48	27	21	58	64	74	74	79	2,43	- 2.5	10	4,493	ne.	24	w.	30	12	14	4	4.1	0.0	0.0	0.0
Wytheville.	2,304	49	56	27.75	30.06	- .01		70.0	+ 6.4	87	16	80	46	30	21	51	63	62	85	2,34	- 1.0	16	2,908	w.	35	w.	20	12	14	4	4.1	0.0	0.0	0.0	
South Atlantic States.																																			
Asheville.	2,255	70	84	27.78	30.07	- .06		71.7	+ 6.7	89	17	82	50	30	21	65	63	85	1,57	- 1.5	12	3,343	nw.	27	n.	21	19	5	6	5.3	0.0	0.0	0.0		
Charlotte.	779	55	62	29.23	30.04	- .03		79.2	+ 5.5	84	2	82	50	27	21	66	66	73	2,55	- 0.7	8	2,135	n.	20	w.	25	15	8	4	6.0	0.0	0.0	0.0		
Hatteras.	11	12	50	30.03	30.04	- .02		77.2	+ 2.5	85	5	87	67	4	72	17	73	71	82	5,03	- 0.3	10	7,253	n.	50	nw.	4	11	14	5	4.4	0.0	0.0	0.0	
Manteo.	12	5	42																																
Raleigh.	376	103	110	28.65	30.03	- .04		78.5	+ 7.9	97	2	82	50	30	21	70	67	76	3,01	- 0.3	13	4,120	sw.	33	n.	4	12	14	4	4.2	0.0	0.0	0.0		
Wilmington.	78	81	91	29.97	30.05	- .06		79.2	+ 6.1	95	5	82	50	27	21	70	70	73	1,88	- 3.4	3	3,770	sw.	24	n.	5	13	14	3	3.7	0.0	0.0	0.0		
Charleston.	48	11	92	30.00	30.05	- .01		81.9	+ 5.7	95	6	82	50	28	21	70	70	73	5,19	- 3.0	3	5,709	s.	34	e.	20	9	12	5	4.8	0.0	0.0	0.0		
Columbia, S. C.	351	41	57	29.68	30.06	+ .01		80.8	+ 7.1	94	4																								

TABLE 1.—*Climatological Data from Weather Bureau Stations, September, 1921—Continued.*

Districts and stations.	Elevation of instruments.			Pressure.			Temperature of the air.						Precipitation.			Wind.									
	Baometer above sea level.	Thermometer above ground.	Anemometer above ground.	Station, reduced to mean of 24 hours.	Sea level reduced to mean of 24 hours.	Departure from normal.	Mean max. + mean min. + 2.	Departure from normal.	Maximum.	Date.	Mean maximum.	Minimum.	Mean minimum.	Greatest daily range.	Mean wet thermometer.	Mean temperature of the dew-point.	Mean relative humidity.	Total.	Total movement.	Prevailing direction.	Maximum velocity.				
	Ft.	Ft.	Ft.	In.	In.	In.	° F.	° F.	° F.		° F.	° F.	° F.	%	° F.	%	In.	Miles	Miles per hour.	Direction.	Date.	Clear days.	Partly cloudy days.	Cloudy days.	Average cloudiness, tenths.
<i>Ohio Valley and Tennessee.</i>																									
Chattanooga.....	762	189	213	29.27	30.06	.00	78.2 + 7.0	93	4	88	56	30	68	24	70	68	80	4.04 + 0.8	13	3,390	w.	38	5.1	0.0	0.0
Knoxville.....	956	102	111	29.03	30.06	.00	77.4 + 8.0	94	17	88	51	30	67	25	69	66	78	1.63 - 1.2	8	3,291	sw.	34	6.2	0.0	0.0
Memphis.....	369	76	97	29.63	30.05	+.02	80.0 + 7.2	94	16	88	50	30	72	20	73	71	80	1.58 - 1.5	9	5,093	nw.	30	4.2	0.0	0.0
Nashville.....	546	163	191	24.47	30.05	-.01	78.6 + 6.5	94	16	87	52	30	69	24	70	68	80	4.32 + 0.0	14	4,332	sw.	38	6.0	0.0	0.0
Lexington.....	959	193	230	29.00	30.04	-.01	73.2 + 5.3	90	17	81	53	30	65	25	67	65	78	5.16 + 2.7	16	7,945	sw.	54	5.6	0.0	0.0
Louisville.....	525	219	255	29.47	30.04	-.02	74.6 + 6.4	94	17	83	53	30	66	25	68	65	77	4.29 + 1.7	14	6,753	s.	53	5.1	0.0	0.0
Evansville.....	431	139	175	29.57	30.03	-.03	75.6 + 5.9	93	16	84	53	30	67	30	68	65	77	3.57 + 1.2	12	6,478	sw.	42	5.6	0.0	0.0
Indianapolis.....	822	194	230	29.14	30.02	-.04	70.8 + 4.1	97	20	79	49	25	62	23	65	62	81	7.54 + 4.5	17	1,211	sw.	50	5.8	0.0	0.0
Royal Center.....	736	11	55	29.22	30.01		67.8 -	97	18	78	40	26	58	23	66	63	79	9.78 -	15	5,959	s.	34	5.6	0.0	0.0
Terre Haute.....	575	94	129	29.38	29.99		72.4 -	93	17	81	45	26	63	32	66	63	79	3.00 + 0.7	10	5,986	sw.	35	5.6	0.0	0.0
Cincinnati.....	628	11	51	29.37	30.03	-.04	72.3 + 5.3	90	17	82	48	26	63	32	64	61	76	2.05 - 0.5	10	6,077	sw.	54	5.1	0.0	0.0
Columbus.....	824	179	222	29.18	30.04	-.03	70.6 + 4.7	89	1	80	48	26	62	27	64	61	73	4.75 + 2.2	15	5,823	sw.	54	5.1	0.0	0.0
Dayton.....	899	181	216	29.05	29.99		71.2 + 3.8	85	1	79	47	26	58	34	62	61	91	5.15 + 2.3	16	2,244	sw.	24	5.9	0.0	0.0
Elkins.....	1,947	59	67	28.06	30.06	-.02	68.3 + 6.4	85	1	79	47	26	58	34	65	63	81	4.47 + 1.8	17	2,786	se.	44	5.8	0.0	0.0
Parkersburg.....	638	77	94	29.40	30.06	-.02	72.8 + 6.7	91	2	82	50	26	63	31	64	61	77	5.07 + 2.6	15	6,428	sw.	49	5.1	0.0	0.0
Pittsburgh.....	842	353	410	29.14	30.03	-.05	70.8 + 4.7	88	1	79	47	26	62	28	64	61	77	5.07 + 2.6	15	6,428	sw.	49	5.1	0.0	0.0
<i>Lower Lake Region.</i>							68.2 + 5.0										72	2,88 + 0.1						5.6	
Buffalo.....	767	247	280	29.17	29.99	-.07	67.6 + 4.7	85	10	74	52	19	61	56	71	1,96 - 1.2	8	11,232	sw.	78	4.8	0.0	0.0		
Canton.....	448	10	61	29.45	29.95	-.11	63.2 + 3.9	88	2	75	39	14	52	35	60	55	69	3.52 + 0.7	13	7,075	sw.	46	4.4	0.0	0.0
Oswego.....	325	76	91	29.21	29.97	-.05	68.5 + 3.5	85	2	74	46	27	59	30	60	55	69	1.45 - 1.4	8	6,950	sw.	38	5.0	0.0	0.0
Rochester.....	323	86	102	29.44	30.00	-.06	68.5 + 5.6	86	2	74	47	27	59	33	60	55	66	1.69 - 0.6	13	5,452	sw.	42	5.0	0.0	0.0
Syracuse.....	397	91	113	29.37	30.01	-.06	67.2 + 5.6	87	1	76	48	20	58	30	61	55	69	1.55 - 1.3	10	7,734	sw.	52	5.6	0.0	0.0
Erie.....	714	130	166	29.23	29.97	-.07	69.1 + 5.2	89	10	76	51	27	62	28	63	60	75	3.24 - 0.2	9	12,189	w.	54	5.6	0.0	0.0
Cleveland.....	762	190	201	29.19	30.01	-.05	69.0 + 5.2	89	1	76	50	26	62	28	63	58	74	2.77 - 0.4	10	8,179	w.	55	5.1	0.0	0.0
Sandusky.....	629	103	123	30.30	30.06	-.06	70.2 + 4.9	90	2	75	50	26	63	27	60	58	74	5.04 + 2.4	13	7,342	sw.	40	5.0	0.0	0.0
Toledo.....	628	208	243	29.33	30.00	-.06	69.9 + 5.6	89	1	78	49	26	61	26	62	58	73	2.90 + 0.5	13	8,904	sw.	52	5.0	0.0	0.0
Fort Wayne.....	856	113	124	29.10	30.01	-.06	69.0 + 3.5	89	1	78	49	26	61	26	62	59	71	2.88 -	12	5,361	sw.	35	4.7	0.0	0.0
Detroit.....	730	218	245	29.21	30.00	-.06	69.5 + 6.4	89	1	77	49	26	62	23	64	59	75	4.64 + 2.2	10	7,040	sw.	43	5.7	0.0	0.0
<i>Upper Lake Region.</i>							64.4 + 5.3										78	3.78 + 0.6						5.2	
Alpena.....	609	13	92	29.28	29.94	-.09	63.4 + 6.1	89	2	73	40	19	54	30	58	55	80	3.87 + 0.4	13	8,411	nw.	42	5.6	0.0	0.0
Escanaba.....	612	54	60	29.25	29.91	-.10	62.4 + 5.5	82	2	71	43	28	54	28	57	53	78	4.58 + 1.0	14	6,978	s.	30	4.5	0.0	0.0
Grand Haven.....	632	54	89	29.20	29.95	-.09	65.8 + 4.7	85	1	73	44	28	58	32	61	59	79	4.07 + 0.9	15	7,944	s.	50	4.8	0.0	0.0
Grand Rapids.....	707	70	87	29.21	29.97	-.08	67.8 + 6.0	90	1	71	46	25	59	33	61	57	75	4.33 + 1.2	13	8,381	se.	25	5.0	0.0	0.0
Lansing.....	878	11	62	29.04	29.98	-.08	66.6 + 5.3	89	1	75	46	25	55	31	60	58	85	2.64 - 0.0	11	8,796	w.	50	5.9	0.0	0.0
Ludington.....	637	60	66	29.26	29.95	-.07	65.2 + 5.4	89	1	71	43	19	54	24	60	57	77	5.03 -	15	7,770	s.	33	4.5	0.0	0.0
Marquette.....	734	77	111	29.12	29.92	-.08	62.2 + 5.4	81	1	71	44	20	54	24	60	57	75	4.03 + 0.8	17	6,786	w.	41	4.8	0.0	0.0
Port Huron.....	638	70	120	29.29	29.98	-.08	66.8 + 5.9	88	1	76	43	26	58	26	60	58	78	2.03 - 0.6	9	6,971	sw.	42	5.0	0.0	0.0
Saginaw.....	641	69	77	29.28	29.97	-.08	66.8 + 5.9	88	1	77	42	26	58	26	60	58	78	2.19 - 0.9	9	5,478	sw.	30	5.0	0.0	0.0
Sault Sainte Marie.....	614	11	52	29.23	29.92	-.10	61.5 + 7.2	86	1	70	44	16	53	28	57	53	81	4.28 + 0.8	11	5,478	sw.	30	4.5	0.0	0.0
Chicago.....	628	140	310	28.11	29.98	-.06	70.0 + 5.4	85	1	77	51	30	64	32	62	58	89	5.72 + 2.7	16	7,709	sw.	39	5.0	0.0	0.0
Green Bay.....	617	109	144	29.26	29.92	-.06	65.4 + 6.3	85	1	74	46	26	57	25	56	56	77	2.62 - 0.5	11	8,236	s.	50	5.0	0.0	0.0
Milwaukee.....	681	125	139	29.22	29.95	-.08	67.2 + 5.7	85	1	74	49	20	60	30	60	56	74	7.26 + 4.3	15	6,752	sw.	36	5.2	0.0	0.0
Duluth.....	1,133	11	47	28.68	29.89	-.09	58.2 + 1.5	84	1	66	35	11	45	36	47	40	64	2.43 + 1.5	12	6,804	w.	40	5.0	0.0	0.0
<i>North Dakota.</i>							57.7 + 0.5										68	3.01 + 1.6						5.8	
Moorhead.....	940	50	58	28.88	29.87	-.09	59.6 + 3.0	95	1	70	35	30	50	33	52	47	70	4.35 + 2.0	14	6,027	nw.	33	5.5	0.0	0.0
Bismarck.....	1,674	8	57	28.14	29.91	-.03	59.2 + 2.1	93	1	71	34	25	48	45	45	42	62	1.67 + 0.5	10	8,252	w.	42	5.5	0.0	0.0
Devon Lake.....	1,483	11	44	28.25	29.84	-.10	56.6 + 1.0	97	1	67	36	30	47	35	50	45	75	3.58 + 2.2	13	7,337	w.	37	5.0	0.0	0.0
Ellendale.....	1,457	10	56	28.34	29.89	-.04	58.4 -	95	1	70	33	30	46	39	57	58	77	5.78 -	11	10,680	nw.	66	5.3	0.0	0.0
Grand Forks.....	835	12	39				58.2 -	92	1	64	36	25	48	33	52	44	51	2.44 - 1.5	9	4,000	s.	40	4.0	0.0	0.0
Williston.....	1,378	41	45	27.89	29.86	-.07	55.4 - 4.1	84	1	66	35	11	45	36	47	40	64	2.43 + 1.5	12	6,447	w.	40	4.1	0.0	0.0
<i>Upper Mississippi Valley.</i>							69.2 + 4.3										78	6.19 + 2.9						5.1	
Minneapolis.....	918	102	208	28.91	29.88	-.07	64.0 -	91	1	73	41	30	55	30	53	47	70	4.35 + 2.0	13	8,546	se.	51	5.5	0.0	0.0
St. Paul.....	837	226	261	28.01	29.92	-.07	63.2 + 2.9	88	1	72	40	30	54	33	52	46	68	3.21 - 0.2	11	9,188	sw.	54	4.6		

TABLE 1.—Climatological data from Weather Bureau Stations, September, 1921—Continued.

Districts and stations.	Elevation of instruments.		Pressure.		Temperature of the air.										Precipitation.			Wind.			Snow, sleet, and ice on ground at end of month.									
	Barometer above level.	Thermometer above ground.	Anerometer above ground.	Station, reduced to mean of 24 hours.	Sea level reduced to mean of 24 hours.	Departure from normal.	Mean max. + min. min. + 2.	Departure from normal.	Maximum.	Date.	Mean maximum.	Minimum.	Date.	Mean minimum.	Greatest daily range.	Mean wet thermometer.	Mean temperature of the dew-point.	Mean relative humidity.	Total.	Departure from normal.	Days with .01 inch or more.	Total movement.	Miles per hour.	Prevailing direction.	Direction.	Maximum velocity.				
	Ft.	Ft.	Ft.	In.	In.	In.	°F.	°F.	°F.		°F.	°F.	°F.	°F.	°F.	°F.	°F.	In.	In.	Miles										
<i>Northern Slope.</i>																														
Billings.....	3,140	5	27,31	29.94	+ .00	56.0	- 2.4	95	1	73	23	11	40	51	44	36	61	0.46	2	5,759	sw.	40	w.	26	5	18	0-10 4.6			
Havre.....	2,505	11	44	24.03	29.89	- .07	58.4	+ 2.1	82	23	73	32	29	44	43	32	43	0.02	- 0.5	10	8,644	w.	58	w.	20	21	7	2.5		
Helena.....	4,110	87	112	25.79	29.98	+ .01	60.8	- 5.4	78	1	61	23	11	41	54	41	31	54	0.19	8	4,674	sw.	42	sw.	26	7	10	1.5 T.		
Kalispell.....	2,973	48	56	26,92	29.97	+ .01	48.3	- 5.1	89	17	80	27	11	38	35	40	32	57	0.79	- 0.5	8	4,668	sw.	34	sw.	5	13	12	6.0	
Miles City.....	2,371	26	48																											
Rapid City.....	3,259	50	58	26,57	29.94	- .02	59.5	+ 0.4	93	1	73	29	11	46	49	48	36	46	0.95	- 0.3	8	8,249	w.	44	nw.	28	11	14	5 4.5	
Cheyenne.....	6,088	84	101	24.03	29.89	- .07	58.4	+ 2.1	82	23	73	32	29	44	43	44	32	43	0.02	- 0.9	2	9,614	w.	58	w.	20	21	7	2.5	
Lander.....	5,372	60	68	24,24	29.94	- .02	55.1	- 0.1	86	1	72	28	11	38	46	41	31	46	0.13	4	4,153	w.	42	sw.	18	19	11	5 3.1		
Sheridan.....	3,700	10	47	26,08	29.98	- .06	55.0	- 2.2	92	1	70	21	11	40	54	43	32	54	0.51	0.0	3	4,234	uw.	32	n.	28	16	8	4.3 0.0	
Yellowstone Park.....	6,200	11	48	23,38	29.97	- .06	46.6	- 6.7	73	1	55	23	29	35	38	37	28	54	0.34	- 0.2	7	6,660	s.	39	sw.	22	8	14	8 5.3	
North Platte.....	2,821	11	51	27,08	29.96	- .02	65.0	+ 1.8	95	23	80	33	30	50	55	49	63	1.00	- 0.5	6	4,955	se.	34	n.	28	20	5	3.2 0.0		
<i>Middle Slope.</i>							71.8 + 4.2																							
Denver.....	5,292	106	113	24.73	29.90	- .06	63.9	+ 1.2	91	14	79	37	30	49	43	49	38	46	0.02	- 0.9	1	5,245	s.	44	nw.	20	22	7	1 2.3	
Pueblo.....	4,635	80	86	25.27	29.88	- .08	66.7	+ 2.8	95	14	83	33	30	51	51	51	39	46	0.25	- 0.4	1	4,573	dw.	36	s.	20	19	1	2.9 0.0	
Concordia.....	1,392	50	58	28.46	29.90	- .09	73.8	+ 5.7	102	3	86	43	30	61	45	61	55	61	1.36	- 1.2	1	6,924	s.	28	s.	9	14	11	5 4.0	
Dodge City.....	2,500	11	51	27.38	29.91	- .07	73.0	+ 4.8	98	2	86	39	30	60	45	61	55	64	1.53	- 0.2	6	8,595	s.	37	sw.	8	22	7	1 2.0	
Wichita.....	1,358	139	158	28.50	29.90	- .10	75.8	+ 5.5	97	3	85	45	30	66	29	65	61	68	4.05	+ 0.9	12	10,144	s.	42	dw.	7	13	12	5 6.7	
Altus.....	1,410	5	51				80.3		103	4	92	45	30	68	33	55	69	63	1.00	- 0.5	6									
Broken Arrow.....	765	11	52																											
Muskogee.....	652	4					81.0		100	14	93	41	30	69	39	58	64	71	1.49		8		31	n.	24	9	18	3 4.2		
Oklahoma City.....	1,214	10	47	28.68	29.92	- .07	78.0	+ 5.9	98	4	88	44	30	68	31	68	64	71	3.79	+ 1.0	10	7,589	s.							
<i>Southern Slope.</i>							78.2 + 5.4																							
Abilene.....	1,738	10	52	28.15	29.91	- .05	81.0	+ 6.8	98	4	92	48	30	70	30	67	61	61	0.94	- 2.2	5	7,733	s.	30	se.	5	18	7	5 3.6	
Amarillo.....	3,676	10	49	26.26	29.92	- .04	73.6	+ 5.9	96	2	86	42	30	61	36	61	55	63	0.76	- 1.6	6	8,530	s.	32	nw.	29	16	13	1 3.4	
Del Rio.....	944	64	71	28.94	29.90	- .05	88.8	+ 4.9	96	4	93	66	30	75	23	59	50	54	0.12	- 2.4	3	8,194	s.	26	ne.	29	14	12	4 3.8	
Roswell.....	3,566	75	85	26.34	29.87	- .05	74.2	+ 3.9	97	9	88	45	30	60	39	59	50	54	0.26	- 2.0	4	4,562	s.	42	nw.	23	13	13	4 4.2	
<i>Southern Plateau.</i>							72.2 + 1.7																							
El Paso.....	3,762	110	133	26.16	29.83	- .05	76.5	+ 3.8	96	7	88	53	30	65	31	62	53	52	2.49	+ 1.0	8	5,641	w.	38	ne.	25	16	12	2 3.4	
Santa Fe.....	7,013	57	66	23.31	29.85	- .08	63.5	+ 2.9	93	27	76	40	30	51	32	49	39	48	0.18	- 1.5	3	4,758	s.	24	s.	18	19	8	4.3 0.0	
Flagstaff.....	6,908	10	59	23.42	29.88	- .01	57.7	+ 2.2	81	26	73	36	4	42	40	50	55	58	0.83		2		30	sw.	18	24	5	1 1.0		
Phoenix.....	1,108	76	81	28.66	29.78	- .03	82.6	+ 1.2	105	25	98	60	21	71	49	54	54	43	0.33	- 0.7	2	8,424	e.	20	w.	27	25	1	2 1.6	
Yuma.....	141	9	54	29.62	29.76	- .02	88.8	- 0.1	109	25	99	62	18	68	41	67	58	51	3.65	+ 3.5	2	2,977	sw.	25	s.	27	27	1	2 1.1	
Independence.....	3,957	9	41	25.92	29.88	+ .02	69.4	+ 0.3	92	28	85	45	17	54	41	49	26	23	0.01	- 0.1	1	3,887	s.	30	s.	17	26	4	0 0.7	
<i>Middle Plateau.</i>							61.7 - 0.7																							
Reno.....	4,532	74	81	25.46	29.90	- .05	60.6	+ 0.9	88	27	78	33	13	43	46	44	28	36	0.12	- 0.2	1	4,758	w.	40	w.	1	24	5	1 1.3	
Tomopah.....	6,090	12	20	24.03	29.89	- .04	64.8	- 0.8	84	26	76	43	18	53	27	47	39	30	0.25	- 0.2	1	4,864	w.	25	se.	22	6	6	0 1.0	
Winnemucca.....	4,344	18	56	25.61	29.96	+ .03	57.4	- 3.1	86	27	76	26	30	39	53	43	30	39	0.01	- 0.3	1	4,615	ne.	27	sw.	19	23	4	3 1.8	
Modena.....	5,479	10	43	24.62	29.93	- .03	60.2	0.0	86	28	78	32	30	42	49	44	25	32	0.23	- 0.9	2	8,023	sw.	50	sw.	27	27	1	2 0.8	
Salt Lake City.....	4,360	163	203	25.61	29.93	- .02	62.6	- 2.5	86	22	74	34	30	51	45	48	35	40	0.44	- 0.4	3	5,389	rw.	32	sw.	22	22	5	2 0.0	
Grand Junction.....	4,602	60	68	25.36	29.89	- .06	67.6	+ 1.2	91	14	82	40	30	53	40	50	36	37	0.04	- 0.9	1	4,423	s.	32	s.	18	22	3	2 0.0	
<i>Northern Plateau.</i>							56.2 - 5.0																							
Baker.....	3,471	48	53	26.46	30.04	+ .05	50.3	- 6.7	80	27	64	21	12	36	43	43	39	61	0.80	0.0	5	4,253	se.	25	sw.	19	15	7	4 3.1	
Boise.....	2,739	78	86	27.15	30.00	+ .03	57.6	- 4.3	83	17	71	34	12	44	43	48	38	52	0.61	+ 0.2	3	3,362	se.	27	w.	28	13	4	3 0.0	
Lewiston.....	757	40	48	29.19	30.00	+ .02	58.6	- 5.4	88	17	72	33	13	46	46	47	32	50	0.79	+ 0.1	8	2,412	e.	24	nw.	28	13	4	3 0.0	
Pocatello.....	4,477	60	68	25.47	29.95	- .01	58.2	- 4.5	85	1	70	29	29	42	43	43	31													

TABLE 2.—Data furnish by the Canadian Meteorological Service, September, 1921.

Stations.	Altitude above mean sea level, Jan. 1, 1919.	Pressure.			Temperature of the air.							Precipitation.		
		Station reduced to mean of 24 hours.	Sea level reduced to mean of 24 hours.	Departure from normal.	Mean max. + mean min. + 2.	Departure from normal.	Mean maximum.	Mean minimum.	Highest.	Lowest.	Total.	Departure from normal.	Total snowfall.	
		Feet.	In.	In.	In.	°F	°F	°F	°F	°F	In.	In.	In.	
St. Johns, N. F.	125													
Sydney, C. B. I.	48	29.93	29.98	-.03	53.2	+1.7	67.4	49.0	85	40	1.92	-1.36	0.0	
Halifax, N. S.	88													
Yarmouth, N. S.	65	29.92	29.99	-.06	57.7	+1.6	65.2	50.2	77	38	2.32	-1.13	0.0	
Charlottetown, P. E. I.	38	29.90	29.94	-.07	59.2	+1.9	66.9	51.4	85	37	4.50	+1.10	0.0	
Chatham, N. B.	28	29.92	29.95	-.05	57.5	+2.1	67.6	47.4	90	32	2.61	-0.10	0.0	
Father Point, Que.	20	29.87	29.89	-.09	50.8	+0.4	59.6	42.0	82	28	2.56	-0.27	0.0	
Quebec, Que.	296	29.63	29.95	-.06	57.7	+2.6	66.6	48.9	85	37	5.22	+1.55	0.0	
Montreal, Que.	137	29.74	29.94	-.10	61.9	+3.5	70.4	53.4	86	44	3.74	+0.44	0.0	
Stonecliffe, Ont.	439	29.34	29.94	-.09	56.7	+1.0	73.3	40.1	92	14	1.76	-1.52	0.0	
Ottawa, Ont.	236	29.69	29.95	-.09	62.9	+5.5	75.8	50.0	94	37	1.51	-1.18	0.0	
Kingston, Ont.	285	29.66	29.96	-.08	65.7	+5.7	73.8	57.6	85	44	2.24	-0.56	0.0	
Toronto, Ont.	379	29.57	29.96	-.10	67.7	+8.7	78.7	56.6	92	43	1.26	-1.99	0.0	
Cochrane, Ont.	930													
White River, Ont.	1,244	28.54	29.84	-.14	53.6	+3.3	64.9	42.3	87	26	4.11	+1.34	0.0	
Port Stanley, Ont.	592	29.37	30.00	-.06	65.4	+5.9	73.9	56.9	86	42	4.54	+1.81	0.0	
Southampton, Ont.	656	29.24			61.5	+7.0	73.7	55.4	86	40	3.70	+0.76	0.0	
Parry Sound, Ont.	688	29.22	29.90	-.13	64.0	+8.0	75.8	52.2	89	36	2.35	-1.32	0.0	
Port Arthur, Ont.	644	29.16	29.87	-.11	57.5	+5.3	66.5	48.6	89	35	2.84	-0.64	0.0	
Winnipeg, Man.	760	28.98	29.80	-.14	56.8	+4.3	65.8	47.8	91	36	3.63	+1.60	0.0	
Minnedosa, Man.	1,690	28.02	29.81	-.13	52.8	+2.3	62.5	43.2	84	32	4.46	+3.10	0.0	
Le Pas, Man.	860													
Qu'Appelle, Sask.	2,115	27.59	29.82	-.10	52.4	+1.3	63.5	41.3	85	29	4.83	+3.50	0.0	
Medicine Hat, Alb.	2,144													
Moose Jaw, Sask.	1,759													
Swift Current, Sask.	2,392	27.33	29.93	+.01	51.6	-1.5	64.1	39.1	85	28	4.24	+3.02	15.0	
Calgary, Alb.	3,428													
Banff, Alb.	4,521													
Edmonton, Alb.	2,150													
Prince Albert, Sask.	1,450	28.28	29.85	-.05	50.9	+2.5	61.9	40.0	74	32	3.00	+1.72	2.8	
Battleford, Sask.	1,592	28.10	29.82	-.08	50.8	-1.0	62.3	39.4	78	31	3.89	+2.64	0.0	
Kamloops, B. C.	1,262													
Victoria, B. C.	230	29.77	30.03	+.02	54.6	-0.2	61.1	48.1	69	42	2.80	+0.64	0.0	
Barkerville, B. C.	4,180													
Triangle Island, B. C.	680													
Prince Rupert, B. C.	170													
Hamilton, Ber.	151													

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MARCH.													
Victoria, B. C.	230	29.77	30.03	+.06	43.9	+2.0	49.6	38.1	56	30	1.23	-1.89	1.9
MAY.													
Banff, Alb.	4,521	25.31	29.85	-.03	45.7	-1.3	59.5	31.9	75	22	1.36	-0.68	3.2
JUNE.													
Stonecliffe, Ont.	489	29.33											
Toronto, Ont.	379	29.58	29.97	.00	68.5	-5.1	79.9	57.1	90	45	2.15	-0.66	0.0
JULY.													
Sydney, C. B. I.	48	29.93	29.97	+.04	66.7	+4.4	77.4	56.2	91	43	0.76	-2.89	0.0
AUGUST.													
Banff, Alb.	4,521	25.40	29.90	-.01	56.2	-0.1	72.0	40.5	83	31	1.40	-1.13	0.0
Calgary, Alb.	3,428	26.45	29.97	+.06	61.3	+1.9	77.8	44.9	91	36	1.61	-0.53	0.0
Medicine Hat, Alb.	2,144	27.62	29.83	-.09	68.7	+3.0	84.6	52.9	96	43	0.53	-1.14	0.0